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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,550	09/18/2000	Hung Huang	36.P282	4566
5514	7590	10/18/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			PATEL, DHAIRYA A	
			ART UNIT	PAPER NUMBER

2151

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/664,550

Applicant(s)

HUANG, HUNG

Examiner

Dhairya A. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is responsive to communication filed on 7/21/05. Claims 1-27 were originally filed. Claims 28-32 are newly added claims. Claims 1-32 are rejected.
2. This amendment has been carefully considered and entered.
3. Applicant's arguments are deemed non-persuasive.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claim 1-11,13-14,16-18,22,24,28-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Yanagidaira et al. U.S. Patent # 6,490,052 (hereinafter Yanagidaira)

As per claim 1, Yanagidaira teaches a method for supporting printer maintenance in a network environment having a server, at least one network device and a printer, the

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server containing a plurality of printer configuration files, said method comprising the steps of:

- accessing one of the printer configuration files which corresponds to the printer, the configuration file including a plurality of printer maintenance function names and a plurality of printer maintenance commands corresponding to the printer maintenance function names (column 6 lines 8-17)(column 5 lines 29-35);

The reference teaches accessing printer information database and language monitors (printer configuration files) which corresponds each printers, and the printer records database and language monitors containing operation mode, power saving, setting of paper feed (printer maintenance function names) and setting states information commands, operating setting state commands (printer maintenance commands) corresponding to the printer maintenance function names.

- generating an HTML-based page corresponding to the printer, the HTML-based page containing each of the printer maintenance function names from the accessed printer configuration file (column 5 lines 43-65) (column 6 lines 4-8,14-28); and

The reference teaches generating a URL and a HTML based file corresponding to the printer containing operating and setting states of each printer which reference to the printer information database.

- sending the HTML-based page to the network device (column 6 lines 20-23),

wherein, upon selection in the network device of one of the printer maintenance function names in the HTML-based page, the server sends to the printer the printer

maintenance command which corresponds to the selected printer maintenance function name (column 7 lines 21-32) (column 5 lines 24-35).

The reference teaches server sending HTML based file with the printer maintenance functions names by the language monitors, which are part of the server sending the maintenance commands to corresponding to printer.

As per claim 2, Yanagidaira teaches a method according to claim 1, further including the step of receiving a printer maintenance request from the network device, the printer maintenance request containing a reference to the printer (column 5 lines 43-67)(column 6 lines 5-10).

As per claim 3, Yanagidaira teaches a method according to claim 2, wherein the accessing step is performed in response to receipt of the printer maintenance request (column 6 lines 8-15).

As per claim 4, Yanagidaira teaches a method according to claim 1, wherein each of the printer configuration files has a standardized data format (column 6 lines 11-15).

The reference teaches having a printer information database and in a database all data is stored in same data structure.

As per claim 5, Yanagidaira teaches a method according to claim 4, wherein the standardized data format is an industry standard format (column 5 lines 20-22)(column 6 lines 11-15).

The reference teaches states which are commonly used in the industry

As per claim 6, Yanagidaira teaches a method of claim 4, wherein the standardized data format includes an industry standard format and an extension to the industry standard format (column 5 lines 20-22)(column 6 lines 11-15).

As per claim 7, Yanagidaira teaches a method of claim 1, wherein each of the printer configuration files includes a plurality of printer maintenance function data sets, wherein each printer maintenance function data set includes a printer maintenance function name, a printer maintenance function description, a printer maintenance function resource and a printer maintenance command parameter (column 5 lines 20-36).

As per claim 8, Yanagidaira teaches a method according to claim 7, wherein the printer maintenance function resource is a file containing image data for incorporation into HTML-based page (column 6 lines 19-21).

As per claim 9, Yanagidaira teaches a method according to claim 8, wherein the image data in the file represents the printer maintenance function name corresponding to the printer maintenance function resource (column 6 lines 25-29).

As per claim 10, Yanagidaira teaches a method according to claim 7, wherein the printer maintenance function command parameter is a printer maintenance function command which is identified by the printer maintenance function name corresponding to the printer maintenance function command parameter (column 5 lines 20-25, 30-35).

As per claim 11, Yanagidaira teaches a method according to claim 7, wherein the printer maintenance function command parameter represents a command file containing a printer maintenance function command which is identified by the printer

maintenance function name corresponding to the printer maintenance function command parameter (column 6 lines 19-29).

As per claim 12, Yanagidaira teaches a method according to claim 7, further including

As per claim 13, Yanagidaira teaches a method according to claim 1 wherein the interface module is a standardized software module for building an HTML-based page (column 6 lines 19-24).

As per claim 14, Yanagidaira teaches a method according to claim 13, wherein the interface module is provided by the operating system of the server (column 6 lines 19-24).

As per claim 16, Yanagidaira teaches a method according to claim 1 wherein the selection by the network device of one of the printer maintenance function names is performed by a user of the network device (column 5 lines 43-46, 56-60).

As per claim 17, Yanagidaira teaches a method according to claim 1, wherein the user of the network device selects one of the printer maintenance functions names by using a pointing device connected to the network device (column 5 lines 56-60).

As per claim 18, Yanagidaira teaches a method according to claim 1, wherein the method is performed in the server (figure 1; column 5 lines 29-41).

The reference all of the functions takes place in the printer server of the reference.

As per claim 22, Yanagidaira teaches a method according to claim 1, wherein the server executes a script to end the printer maintenance command to the printer (column 7 lines 21-32).

As per claim 24, Yanagidaira teaches a method for supporting printer maintenance in a network environment having a server, at least one network device and a printer, the server containing a plurality of printer configuration files, said method comprising the steps of:

- receiving a printer maintenance request from one of the network devices, the printer maintenance request containing a reference to the printer (column 5 lines 29-35, lines 55-60).

- accessing one of the printer configuration files which corresponds to the printer, the printer configuration files having a standardized data format and including a plurality of printer maintenance function data sets each of which includes a printer maintenance function name, a printer maintenance function description, a printer maintenance function resource and a printer maintenance function command parameter (column 6 lines 8-17)(column 5 lines 29-35).

- generating, by use of an interface module in the server, an HTML-based page corresponding to the printer, the HTML-based page containing for each printer maintenance function data set the corresponding printer maintenance function name, printer maintenance function description, and the printer maintenance function resource (column 5 lines 43-65) (column 6 lines 4-8, 14-28).



-sending the HTML-based page to the network device that sent the printer maintenance request (column 6 lines 20-23).

-wherein, upon selection by the network device of one of the printer maintenance function names in the HTML-based page, the server sends to the printer a printer maintenance function command which is derived from the printer maintenance function command parameter corresponding to the selected printer maintenance function name (column 7 lines 21-32) (column 5 lines 24-35).

As per claim 28, Yanagidaira teaches printer maintenance method in a network environment having a server and at least one network device to which a printer is connected said method comprising the steps of:

-sending from the server to the network device display data containing at least one printer maintenance function identification (column 5 lines 28-42).

The reference teaches sending from the server to the client operating and setting states of each printer (one printer maintenance function identification).

-receiving in the server a selection from the network display device of a printer maintenance function identification (column 5 lines 55-65); and

-sending from the server to the printer connected to the network device a printer maintenance command corresponding to the printer maintenance function identification selected in the network display device (column 5 lines 24-35,55-60)(column 7 lines 21-32).

As per claim 29, Yanagidaira teaches a method according to claim 28, wherein said sending step for the display data containing at least one printer maintenance

function identification corresponding to the printer connected to the network device (column 5 lines 24-35,55-60)(column 7 lines 21-32).

As per claim 30, Yanagidaira teaches a method according to claim 28, wherein said server sends the printer maintenance command corresponding to the printer maintenance function identification selected in the network device and corresponding to the printer connected to the network device (column 5 lines 24-35,55-60).

As per claim 31, Yanagidaira teaches a network server for printer maintenance in a network environment having at least one network device to which a printer is connected, comprising:

-a program memory for storing process steps executable to perform a method according to claim 28; and a processor for executing the process steps stored in said program memory (figure 1).

As per claim 32, Yanagidaira teaches a computer-executable process steps stored on a computer readable medium, said computer-executable process steps for printer maintenance in a network environment having a server and at least one network device to which a printer is connected, said computer-executable process steps comprising process steps executable to perform a method according to claim 28 (column 6 lines 8-28, column 7 lines 21-32)(Fig. 1).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 12,15,23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagidaira et al. U.S. Patent # 6,490,052 (hereinafter Yanagidaira).

As per claim 12, Yanagidaira teaches a method according to claim 7, but is silent on teaching further including a command parameter indicator which, when set to a first value, indicates that the printer maintenance function command parameter is a printer maintenance function command and, when set to a second value, indicates that the printer maintenance function command parameter represents a command file containing a printer maintenance function command. It is old and well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira. It would have been obvious to one of ordinary skill in the art to recognize the desirability and advantages of modifying Yanagidaira's invention by employing the use of a parameter to determine if the instruction is a single command or a file. This benefits the system because different modes (protocols) of communication may be required depending on the format of the data. In the instance that a large file is to be sent, communication may be delayed until a time of low network usage.

As per claim 15, Yanagidaira teaches a method according to claim 1, but is silent in teaching wherein the interface module is a common gateway interface module. It is old and well known in the art to have an interface module as a common gateway interface module. It would have been obvious to one of ordinary skill in the art to recognize the desirability and advantages of modifying Yanagidaira's invention by employing the use of common gateway interface module. This is common in the art and

would benefit the system by allowing new devices and functions to be implemented more quickly and reliably.

As per claim 23, Yanagidaira teaches a method according to claim 22, but is silent in teaching wherein the script is a common gateway interface script. It is old and well known in the art to have a script, which is common gateway interface script. It would have been obvious to one of ordinary skill in the art to recognize the desirability and advantages of modifying Yanagidaira's invention by employing use of common gateway interface script. This is common in the art and would benefit the system by allowing new devices and functions to be implemented more quickly and reliably.

6. Claims 19-21,25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagidaira et al. U.S. Patent # 6,490,052 (hereinafter Yanagidaira) in view of Lauder et al. U.S. Patent # 6,253,238 (hereinafter Lauder).

As per claim 19, Yanagidaira teaches a method according to claim 1, but fails to teach wherein the network environment is a digital cable network. Lauder teaches the network environment is a digital cable network (Figure 4, column 6 lines 53-58). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to modifying Yanagidaira's invention to employ the use of a digital cable network. This benefits the system by allowing a large number of users on smaller home networks to a service network printers.

As per claim 20, Yanagidaira and Lauder teach a method according to claim 19, but Yanagidaira fails to teach wherein the network device is a set top box. Lauder teaches the network device is a set top box (figure 4, column 6 lines 53-58). It would

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have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to modifying Yanagidaira's invention to employ the use of a set top box. The motivation for doing so would have been so that this would allow a larger number of users on a smaller home networks to service network printers using hardware already installed in the home.

As per claim 21, Yanagidaira and Lauder teaches a method according to claim 19, but Yanagidaira fails to teach wherein the method is performed in the server which is located in a cable head end of the digital cable network. Lauder teaches the method is performed in the server, which is located in a cable head end of the digital cable network (figure 4, column 6 lines 53-58). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to modifying Yanagidaira's invention to implement the method is performed in the server which is located in a cable head end of the digital cable network. The motivation for doing so would have been so that this would allow the server to run on a piece of hardware already functioning in the desired location.

As per claim 25, Yanagidaira teaches a network server for supporting printer maintenance in a network environment having at least one network device and a printer, the server containing a plurality of printer configuration files, comprising: a program memory for storing process steps executable to perform a method according to any of claims 1 to 24; and a processor for executing the process steps stored in said program memory (figure 1).

As per claim 26, Yanagidaira teaches computer-executable process steps stored on a computer readable medium, said computer-executable process steps to support printer maintenance in a network environment having a server, at least one network device and a printer, the server containing a plurality of printer configuration files, said computer-executable process steps comprising process steps executable to perform a method according to any of claims 1 to 24 (column 6 lines 8-28, column 7 lines 21-32)(Fig. 1).

As per claim 27, Yanagidaira teaches a computer-readable medium which stores computer-executable process steps stored on a computer readable medium, said computer-executable process steps to support printer maintenance in a network environment having a server, at least one network device and a printer, the server containing a plurality of printer configuration files, said computer-executable process steps comprising process steps executable to perform a method according to any of claims 1 to 24 (column 6 lines 8-28, column 7 lines 21-32)(Fig. 1).

### ***Response to arguments***

7. As per arguments, applicant stated the following:

A). Applicant states Yanagidaira does not teach that the server sends a printer maintenance function to the printer.

B). Applicant states Yanagidaira does not show anything corresponding to a printer maintenance functions, printer maintenance commands, or names for printer maintenance functions.

C). Applicant states, Yanagidaira does not disclose or suggest that a server sends anything to a printer “upon selection in the network device of one of the printer maintenance function names in the HTML-based page”.

As per argument A, examiner respectfully disagrees with the applicant. In column 5 lines 10-16 teaches that language monitor are installed on the server and hence they are part of the server. Applicant agrees in his remarks on page 2 paragraph 3 and page 3 paragraph 1 that “responsibility lies with the language monitors, which retrieve the information from the printer information database and send the information to the printers” and “language monitor retrieve setting states recorded in the printer information database and send those setting states to the printer”. Since language monitors are part of the server it means that server is sending setting states information (printer maintenance function) to the printer. Examiner would also like to point out that no where in the claim language does it states that server sends a printer maintenance function to the printer. Therefore examiner did not find applicant’s remark persuasive.

As per argument B, examiner respectfully disagrees with the applicant. In column 6 lines 8-17 and column 5 lines 29-35 Yanagidaira teaches accessing printer information database and language monitors (printer configuration files) which corresponds each printers, and the printer records database and language monitors containing operation mode, power saving, setting of paper feed (printer maintenance function names) and setting states information commands, operating setting state commands (printer maintenance commands) corresponding to the printer maintenance function names.

As per argument C, examiner respectfully disagrees with the applicant. In column 5 lines 10-16 teaches that language monitor are installed on the server and hence they are part of the server. Applicant agrees in his remarks on page 2 paragraph 3 and page 3 paragraph 1 that "responsibility lies with the language monitors, which retrieve the information from the printer information database and send the information to the printers" and "language monitor retrieve setting states recorded in the printer information database and send those setting states to the printer". Since language monitors are part of the server it means that server is sending setting states information (printer maintenance function) to the printer. Examiner would also like to point out that no where in the claim language does it states that server sends a printer maintenance function to the printer. In column 7 lines 21-32 and column 5 lines 24-35 Yanagidaira teaches server sending HTML based file with the printer maintenance functions names by the language monitors which are part of the server, the maintenance commands to corresponding to printer.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A). "Printer Controller" by Yanagidaira et al. U.S. Patent # 6,490,052.

B). "Interactive cable television system with frame grabber" by Lauder et al. U.S. Patent # 6,253,238.

9. A shortened statutory period for response to this action is set to expire 3



**(three) months and 0 (zero) days** from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the applicant (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

10.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhairya A. Patel whose telephone number is 571-272-5809. The examiner can normally be reached on 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAP

  
ZARNI MAUNG  
SUPERVISORY PATENT EXAMINER